

IN THE CLAIMS:

The text of all pending claims, (including withdrawn claims) is set forth below. Cancelled and not entered claims are indicated with claim number and status only. The claims as listed below show added text with underlining and deleted text with ~~strikethrough~~. The status of each claim is indicated with one of (original), (currently amended), (cancelled), (withdrawn), (new), (previously presented), or (not entered).

Please CANCEL claims 4, 5, 11 and 12 without prejudice or disclaimer, AMEND claims 1, 7, 8, 13, and 14, and ADD new claim 15 in accordance with the following:

1. (currently amended) A bandpass filter, comprising an inductor having a non-gapped core that consists essentially of an ~~Fe-based~~ Fe-B-Si amorphous metal-alloy ribbon with Fe content in a vicinity of 80 atomic percent and having a crystallization temperature ranging from 500°C to 530°C and heat-treated below the alloy's crystallization temperature, a linear BH loop ~~having a squareness ratio that approaches zero over a field strength range of approximately -15 to +15 oersteds, and has a constant permeability ranging from 400 to 1000 over a frequency range of about 1 to 1000 kHz, wherein the permeability is linear up to an induction level of 13 kG.~~

2. (cancelled)

3. (cancelled)

4. (canceled)

5. (canceled)

6. (cancelled)

7. (currently amended) ~~An inductor~~ A bandpass filter as recited by claim 51, wherein said ~~substantially-constant~~ permeability is extant over a field strength range of approximately -15 to +15 Oe.

8. (currently amended) A bandpass filter as recited by claim 1, wherein the bandpass filter is utilized to select frequency bands in communication systems. ~~In a method for limiting~~

~~frequency communications, the improvement wherein there is utilized an inductor having a non-gapped core consisting essentially of an Fe-based amorphous metal alloy ribbon, having a linear BH loop having a squareness ratio that approaches zero over a field strength range of approximately -15 to +15 oersteds, and having a constant permeability over a frequency range of about 1 to 1000 kHz.~~

9. (cancelled)

10. (cancelled)

11. (canceled)

12. (canceled)

13. (currently amended) A bandpass filter, comprising:

an inductor having a non-gapped core ~~comprising~~ consisting essentially of an Fe-based amorphous metal alloy ribbon with an Fe content in a vicinity of 80 atomic percent and having crystallization temperature ranging from 500°C to 530°C, heat-treated below the alloy's crystallization temperature, and having a linear BH loop having a squareness ratio that approaches zero over a field strength range of approximately -15 to +15 Oerstedsoersteds,

wherein the permeability of the core is constant at near zero field over a field strength range of approximately -15 to +15 Oersteds (Oe).

14. (currently amended) The bandpass filter of claim 1, wherein the center frequency of said filter has frequency shifts of less than ~~100~~ 50 Hz up to the bias field of ~~15~~ 10 Oe.

15. (new) A bandpass filter, comprising an inductor having a non-gapped core that consists essentially of an Fe-B-Si amorphous alloy ribbon with Fe content in a vicinity of 80 atomic percent and having a crystallization temperature ranging from 500°C to 530°C and heat-treated below the alloy's crystallization temperature, a linear BH loop and a constant permeability ranging from 400 to 1000 over a frequency range of about 1 to 1000 kHz, wherein the permeability is linear up to an induction level of 13 kG.